

Claims

- [c1] An oiling roller assembly, comprising:
 - an oiling roller;
 - a roller shaft about which the oiling roller rotates;
 - and
 - at least one cap unit disposed on an end of the roller shaft.
- [c2] The assembly of claim 1, wherein the at least one cap unit comprises a pair of caps.
- [c3] The assembly of claim 2, wherein each of the pair of caps is substantially identical.
- [c4] The assembly of claim 1, wherein the at least one cap further comprises a flange portion at an end of the cap that comes into contact with the oiling roller, and a recess portion at an opposite end of the cap.
- [c5] The oiling roller assembly of claim 1, further comprising a retainer disposed onto at least one end of the roller shaft.
- [c6] The oiling roller assembly of claim 1, wherein the at least one cap unit disposed on an end of the oiling roller can

be squeezed with an inward force to deflect the roller, while the roller provides an opposite force lateral load to the end cap.

- [c7] A drum maintenance unit, comprising the oiling roller assembly of claim 1.
- [c8] The drum maintenance unit of claim 7, further comprising a drawer, wherein the oiling roller assembly is installed in the drawer.
- [c9] The drum maintenance unit of claim 7, wherein the oiling roller assembly is held in place by latching features.
- [c10] A method of mounting an oiling roller assembly in a drum maintenance unit, comprising connecting at least one cap unit to an end of an oiling roller assembly.
- [c11] The method of claim 10, further comprising mounting the oiling roller on a roller shaft and disposing the at least one cap unit on at least one end of the roller shaft.
- [c12] The method of claim 10, wherein disposing the at least one cap unit comprises disposing a pair of caps on respective ends of the roller shaft.
- [c13] The method of claim 10, further comprising:
 - pressing the at least one cap unit with an inward force sufficient to compress and deflect an end of the

roller;
placing the oiling roller assembly into a cassette of
the drum maintenance unit; and
releasing the compressed roller to spring back with
sufficient lateral load applied to the at least one cap
unit to hold the oiling roller assembly in place.

- [c14] The method of claim 13, wherein the oiling roller assembly is positioned in the cassette so that the center of the roller corresponds to about the center of an image on an image drum.